



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

646.2910

Job Sheet 170444



Part No: 646.2910

Job Qty: 8 ea

Part Name: Deflector



Part Weight: 0 lbs

Status: Scheduled

Priority: Medium

Job Created: 1/16/18

Job Tracking No:

Due Date: 2/8/18

Created By: Linda Lacelle

Type: SOLD

Description:

Ship Via:

Bill of Materials

Job Routing

Op No	Operation	Qty	Start Date	Due Date	Standard		Workcenter/Supplier		Sign-off
					Setup	Run	Workcenter / Supplier	Lead Time	
90	Start up Operation	8 Ea		2/7/18	0.00	0.00	Start Up Machining-1		18-05-06
100	Bandsaw	8 pcs		2/7/18	0.00	0.02	Bandsaw1		18-05-06
110	CNC Vertical Machining	8 pcs		2/8/18	0.15	5.33	HAAS1-1		18-05-06
120	QC	8 pcs		2/8/18	0.00	0.00	QC2 Machining-1		18-05-06
130	QC	8 pcs		2/8/18	0.00	0.00	QC8 Machining-1		18-05-06
140	Outsource	8 pcs		2/8/18			ATG001-VC		18-05-09
150	Packaging	8 pcs		2/8/18	0.00	0.00	Packaging2		18-05-09
155	QC	8 pcs		2/8/18	0.00	0.00	QC5		18-05-09
180	Packaging	8 pcs		2/8/18	0.00	0.00	Packaging3-1		18-05-09
190	QC21-SA	8 Ea		2/8/18	0.00	0.00	QC21		18-05-09

Part Op 100 - 42.600" long

Descriptions: 140 - Issue P/O to ATG : 100-5824 Hard Anodize, Color Black / Prime As per Dwg 646.2900 Rev. N/C

180 - ***IDENTIFY AS PER APICAL MPP-120 BY STAMPING P# AND REV***

Job Allocations

Operation	Component Part	Required	Inventory	Allocated	Std Qty
90-Start up Operation	<u>646.2900E</u>	29	1	0	0

1707576 B1.250x7.00

14.4

646.2900E

1707576

8x8305

S068305 → S069571



Container No: S069604



Part: 646.2910

Job No: 170444

Serial No/Batch: S069604

Revision: N/C

Inspector:

Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
CANADA
TEL.: 1 613 632-5200
Email: sales@dartaero.com
www.dartaerospace.com

DQA: _____ Date: _____

**WORK ORDER NON-CONFORMANCE / UPDATE**

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date :	Step #:	QTY Effective :		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition		Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY			
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐
Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____			
Misidentified ☐	Past Due ☐				

Part Specifications					
Spec No	Description	Target/Tolerance	Limits	Type	Special Comments
1	Deflector	0.360inches $\pm$ 0.010	0.370 0.350		
2	Deflector	1.320inches $\pm$ 0.010	1.330 1.310		
3	Deflector	3.300inches $\pm$ 0.010	3.310 3.290		
4	Deflector	3.000inches $\pm$ 0.010	3.010 2.990		
5	Deflector	0.360inches $\pm$ 0.010	0.370 0.350		
6	Deflector	190.000inches $\pm$ 0.010	190.010 189.990	Radius	
7	Deflector	0.090inches $\pm$ 0.010	0.100 0.080	Radius	
8	Deflector	1.000inches $\pm$ 0.010	1.010 0.990		
9	Deflector	42.380inches $\pm$ 0.010	42.390 42.370		
10	Deflector	20.000Degrees $\pm$ 0.010	20.010 19.990	Angle	

Plex 1/16/18 12:59 PM dart.lacelle.linda

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date :	Step #:	QTY Effective :		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition			
				Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
OTHER : _____					



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

PURCHASE ORDER **PO039824**

Supplier: ATG001-VC
A.T.G. Industries Inc
731 INDUSTRIELLE ROAD
ROCKLAND
ON
K4K 1T2 Canada
Phone: 613-446-4544
Fax: 613-446-4556

Attention: Lalande, Marc-Andre

Ship To: 1270 Aberdeen Street
Hawkesbury
ON
K6A 1K7 Canada
Phone: 613-632-5200

PO No: PO039824
PO Date: 5/8/18
Due Date: 5/17/18
Purchase Order
Revision:
Revision Date:
Ship-To Contact: Tsimiklis, ChrisoulaPhone:

Via: Ground
Pynt Terms: Net 30

Freight Terms:
Special Comments:

Items										
Line Item	Job	Part	Description	Status	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (CAD)	Extended Price
1	175552	644.4113	Spacer, Stop 1-ISSUE P/O TO ATG: _____ 2-Anodize Black -MPP-172 Section 2.1 -Hard Anodize IAW Mil-A-8625 Type 3 Class 2 3-Certification of Conformity is required	Firmed	5/16/18	20 pcs	0 pcs 20x	20 pcs	\$4.20/pcs AT 19/05/17	\$84.00
2	175557	644.4114	Washer, Pivot 1-ISSUE P/O TO ATG: _____ 2-Anodize Black -MPP-172 Section 2.1 -Hard Anodize IAW Mil-A-8625 Type 3 Class 2 3-Certification of Conformity is required	Firmed	5/16/18	10 pcs	0 pcs 10x	10 pcs	\$5.70/pcs AT 19/05/17	\$57.00
3	175558	644.4119	Spacer, Fwd Stop 1-ISSUE P/O TO ATG: _____ 2-Anodize Black -MPP-172 Section 2.1 -Hard Anodize IAW Mil-A-8625 Type 3 Class 2 3-Certification of Conformity is required	Firmed	5/16/18	20 pcs	0 pcs 20x	20 pcs	\$4.50/pcs AT 19/05/17 CDL	\$90.00

Items										
Line Item	Job	Part	Description	Status	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (CAD)	Extended Price
4	175738	649.4813	Shim ISSUE P/O: _____ AS Per MPP-172 Section 2.1, Hard Anodize IAW MIL-A-8625, Type III, Class 2, Color Black As Per MPP-172 Section 4.2 Prime IAW MIL-P-23377J Type1 Class N	Firmed	5/16/18	11 pcs	0 pcs	11 pcs	\$7.45/pcs	\$81.95
	172764			Firmed	5/16/18	15 pcs	150 pcs	15 pcs	\$7.45/pcs	\$111.75
	177140			Firmed	5/16/18	20 pcs	200 pcs	20 pcs	\$7.45/pcs	\$149.00
Sub Total:						46	0	46		\$342.70
5	176020	649.5111	LH Wiper Deflector Issue P/O to ATG : _____ AS PER DWG 649.5100 1- Black Anodize as per 2- PRIME AS PER DWG, SEE NOTE #2 Certification of Conformity is required	Firmed	5/16/18	10 pcs	0 pcs	10 pcs	\$17.50/pcs	\$175.00
6	176604	D5230-1	Mounting Plate Outsource process-Anodize per QSI017 4.1.10.1 ISSUE P/O: _____ SUPPLIER: ATG HARD ANODIZE BLACK AS PER MIL SPEC AND DWG C OF C IS REQUIRED	Firmed	5/16/18	10 pcs	0 pcs	10 pcs	\$9.70/pcs	\$97.00
7	176021	649.5112	RH Wiper Deflector Issue P/O to ATG : _____ AS PER DWG 649.5100 1- Black Anodize 2- PRIME, SEE NOTE #2 Certification of Conformity is required	Firmed	5/16/18	10 pcs	0 pcs	10 pcs	\$17.50/pcs	\$175.00
8	175562	644.4124	Washer, Pivot 1-ISSUE P/O TO ATG: _____ 2-Anodize Black -MPP-172 Section 2.1 -Hard Anodize IAW Mil-A-8625 Type 3 Class 2 3-Certification of Conformity is required	Firmed	5/16/18	10 pcs	0 pcs	10 pcs	\$5.70/pcs	\$57.00
9	170444	646.2910	Deflector Issue P/O to ATG : _____ Hard Anodize, Color Black / Prime As per Dwg 646.2900 Rev. N/C	Firmed	5/16/18	8 pcs	0 pcs	8 pcs	\$49.20/pcs	\$393.60
	174119			Firmed	5/17/18	7 pcs	0 pcs	7 pcs	\$49.20/pcs	\$344.40
Sub Total:						15	0	15		\$738.00
10	177135	649.5012	Deflector Issue P/O to ATG: _____ AS PER MPP-172 SECTION 2.1, HARD ANODIZE COLOR BLACK, PER IAW MIL-A-8625 TYPE 3 CLASS 2 AS PER MPP-172 SECTION 4.2, PRIME AS PER IAW MIL-PRF-23377 TYPE 1 CLASS N Certification of Conformity is required	Firmed	5/16/18	16 pcs	0 pcs	16 pcs	\$8.50/pcs	\$136.00
Grand Total:										\$1,951.70
Order Notes										
Plex 5/16/18 8:15 AM dart.tsimiklis.chrisoula										

AT 18/05/1

AT 18/05/1

AT 18/05/1

AT 18/05/16

AT 18/05/18

AT 18/05/16

AT 18/05/17

DAS
11
9-89



A.T.G. Industries Inc.
731 Industrielle Street
Rockland, ON K4K 1T2
Canada

Ph: (613) 446-4544

Fax: (613) 446-4556

Pack List

Number: 915235

Date: 25-May-18

To

Dart Aerospace Ltd
1270 Aberdeen St
Hawkesbury, ON K6A 1K7

Ship To

Chrisoula Tsimiklis
Dart Aerospace Ltd
1270 Aberdeen St
Hawkesbury, ON K6A 1K7

Ph: 613 632-9577

Fax: 613 632-1053

Ph: 613 632-9577

Fax: 613 632-1053

Terms		Ship Via	
		OUR TRUCK	
Quantity	Description		
	Please reference this document's Pack List number on all correspondences regarding this shipment. If you have any questions, please contact us.		
16 ea	Part: 649.5012 Rev: D Deflector Hard Black Anodize per MIL-A-8625F, Type III, Class 2, .0005-.0045" (.5 - 4.5mils) Prime per MIL-PRF-23377, Type I, Class N (Customer Supplied), .0001-.0002" (1 - 2 mils) per drawing. Job: 23046 PO: PO039824 Line: 11		
8 ea	Part: 646.2910 Rev: N/C Deflector Hard Black Anodize per MIL-A-8625F, Type III, Class 2, .0005-.0045" (.5 - 4.5mils) Prime per MIL-PRF-23377, Type I, Class N (Customer Supplied), .0006-.0009" (.6 - .9 mils) per drawing. Job: 23045 PO: PO039824 Line: 0		
CERTIFICATE OF CONFORMANCE A.T.G Industries Inc. certifies that all items in this shipment conform to the requirements. Date: <u> </u> Certified Signature: <u> </u> Receiver Signature: <u> </u> A.T.G Industries Inc. is AS9100 Registered and Nadcap Chemical Processing Accredited. Note: This Packing Slip may contain parts that have been PLATED. Items that are plated may be subject to natural tarnishing and it is suggested that they be inspected within 24 hours of receipt.			
DAS 11 9-89 MAY 25 2018			
Made in Canada.			